

AMENDMENTS TO THE CLAIMS:

Amend the claims as follows:

1. (Currently Amended) A protein hydrolysate comprising peptides and tripeptides, said tripeptides having a formula selected from the group consisting of the formula Pro-Xaa₁-Xaa₂ or Xaa₁-Xaa₂-Pro Pro-Pro-Xaa₁-Xaa₂ [[or]] and Xaa₂-Xaa₁-Pro, wherein Xaa₁ and Xaa₂ may be the same or different and Xaa₁ and Xaa₂ are any is a naturally occurring amino acid other than Pro and Xaa₂ is a naturally occurring amino acid, said protein hydrolysate being the product of the hydrolysis of a protein-containing composition with a proline-specific endoprotease and a tripeptidase.

2. (Previously Presented) The protein hydrolysate of claim 1 wherein at least 20 molar % of peptides in said protein hydrolysate having a molecular weight of 200 to 2000 Da is present in the protein hydrolysate as tripeptides.

3. (Previously Presented) The protein hydrolysate of claim 1 wherein at least 20% of the proline present in a starting protein that forms the protein hydrolysate is present in the tripeptides.

4. (Previously Presented) The protein hydrolysate of claim 1 wherein at least 30% of the tripeptides have a carboxy terminal proline.

5. (Previously Presented) The protein hydrolysate of claim 1 wherein at least 70 molar % of peptides present in the hydrolysate contain 2 to 7 amino acid residues (dipeptide to heptapeptide).

AMENDMENT AFTER FINAL REJECTION

6. (Withdrawn) A method of producing a protein hydrolysate comprising

contacting a protein substrate with:

a) endoprotease; and

b) tripeptidase (TPAP).

7. (Withdrawn) The method of claim 6 wherein the endoprotease is a proline specific endoprotease (PSE), a serine protease, an aspartic protease or a metalloendoprotease.

8. (Withdrawn) The method of claim 6 wherein the protein substrate is first contacted with serine protease, aspartic protease or metalloendoprotease and subsequently the TPAP and optionally PSE is added.

9. (Withdrawn) A method of using the protein hydrolysate of claim 1 comprising consuming the hydrolysate wherein a mammal performs the consuming step.

10. (Withdrawn) An enzyme composition comprising

(a) an endoprotease and

(b) a tripeptidase (TPAP).

11. (Withdrawn) The enzyme composition of claim 10 wherein the endoprotease is a serine protease, an aspartic protease, a metalloendoprotease or a proline specific endoprotease (PSE).

AMENDMENT AFTER FINAL REJECTION

12. (Withdrawn) The enzyme composition of claim 10 whereby this composition when added to a suitable protein is able to produce a protein hydrolysate of which is rich in tripeptides whereby the tripeptides are rich in proline at one end thereof.

13. (Withdrawn) A food or feed product comprising a hydrolysate of claim 1.

14. (Withdrawn) A method of reducing the intolerance to proline rich food stuffs comprising incubating a protein substrate found in proline rich food stuffs with the enzyme composition of claim 10 wherein the intolerance of the incubated protein substrate is reduced in comparison to the protein substrate that has not been incubated.

15. (Withdrawn) A method of producing food or feed comprising

incubating a protein substrate with the enzyme composition of claim 10; and
producing food or feed from the incubated protein substrate.

16. (Previously Presented) The protein hydrolysate of claim 2 wherein at least 25 molar % of the peptides in said protein hydrolysate having a molecular weight of 200 to 2000 Da is present in the protein hydrolysate as tripeptides.

17. (Previously Presented) The protein hydrolysate of claim 16 wherein at least 30 molar % of the peptides in said protein hydrolysate having a molecular weight of 200 to 2000 Da is present in the protein hydrolysate as tripeptides.

18. (Previously Presented) The protein hydrolysate of claim 3 wherein at least 30% of the proline present in the starting protein is present in the tripeptides.

AMENDMENT AFTER FINAL REJECTION

19. (Previously Presented) The protein hydrolysate of claim 18 wherein at least 40% of the proline present in the starting protein is present in the tripeptides.

20. (Previously Presented) The protein hydrolysate of claim 4 wherein at least 35% of the tripeptides have a carboxy terminal proline.

21. (Previously Presented) The protein hydrolysate of claim 5 wherein at least 75 molar % of the peptides contain 2 to 7 amino acid residues (dipeptide to heptapeptide).

22. (Withdrawn) The method of claim 7 wherein the endoprotease is PSE.

23. (Withdrawn) The method of claim 9 wherein the mammal is a human.

24. (Withdrawn) The enzyme composition of claim 11 wherein the endoprotease is PSE.

25. (new) The protein hydrolysate of claim 1 wherein the protein-containing composition is selected from the group consisting of whole milk, skimmed milk, acid casein, rennet casein, acid whey products and cheese whey products.

26. (new) The protein hydrolysate of claim 1 wherein the protein-containing composition is selected from the group consisting of a collagen based animal protein-containing composition, a fish-bone-containing composition, a wheat protein-containing composition, a maize gluten protein-containing composition, a soy protein-containing composition and a rice protein-containing composition.

27. (new) The protein hydrolysate of claim 1 wherein the tripeptides as of the following formula: Xaa₂-Xaa₁-Pro.